

# American Engineering Consultants of Marco Island, Inc.

573 Bald Eagle Drive  
Marco Island, Florida 34146  
239-394-1697

PW Review

zluff 10/09/2025 3:09:30 PM

October 6, 2025

Ms. Mary Holden  
Senior Planner  
City of Marco Island  
50 Bald Eagle Drive  
Marco Island, Florida 34145

Re: Marco Island Utilities SWTP Site Development Plan Amendment (**SDP 25-000130**)

Dear Ms. Holden

This letter accompanies the resubmittal of a Site Improvement Plan Amendment for the City of Marco Island South Water Treatment Plant site on Lily Ct. I have repeated the comments as received, followed by responses from the design team (in **blue**).

Note: Comments from Public Works are duplicated in the Corrections Report. For brevity we will only show the comments once and respond once.

## **FIRE REVIEW**

Comments: Provide a flow test not more than six months old, at time of submittal, on Fire Rescue Department letterhead. FFPC 8th ed. I: 18.4.5.2

**A fire flow test was performed in February; copy included with this re-submittal. We request that the six-month requirement be waived. The results show nearly 2000 GPM with 60 PSI residual; this is to be expected as the facility is within a water plant. A retest will show similar results.**

Comments: Please provide a signed and sealed utility plan that clearly identifies and delineates the underground fire line from the point of service to the point of connection, including all fire protection appurtenances such as fire hydrants, backflow preventers, and post indicator valves (PIVs). The point of service must be labeled on the Site Development Plan (SDP) in accordance with Florida Statute 633.102(24), which defines it as the location where the underground piping becomes used exclusively for the fire protection system. Similarly, the point of connection must also be identified on the SDP drawings; this refers to the location at which the underground piping begins serving the proposed building exclusively as part of its fire protection system. See NFPA 24: Standard for the Installation of Private Fire Service Mains and Their Appurtenances.

**A utility plan is a part of the civil plan set submitted. Please refer to sheet C-4.**

Comments: Fire routing exhibit - Please provide a vehicle tracking exhibit for fire apparatus in color, on its own dedicated page, enlarged, such that staff can make clear distinction between curbing, tire path, and swept path. Plan should be depicted clear and decipherable. The turning radii throughout a fire access lane serving a building is required to be 25-feet inside and 49-feet outside and the turning radii shall be 25-feet inside and 45-feet outside for fire access lanes within large parking lots in accordance with City of Marco Island Code of Ordinances. Fire Department access roads shall have an unobstructed width of not less than 20-feet, see FFPC 8th ed. I: 18.2.3.5.1.1. Please provide plans using a truck turning software program to track the turning radius for City of Marco Island fire apparatus. FFPC 8th ed. I: 18.2.3; 18.1.3.1

For the Vehicle Tracking Software please use the following specifications for Tower 50; our largest apparatus. Pierce Quantum 105' Aerial Truck: Overall Length - 42'6" Axle Track - 82.92 in. Wheel Base - 255.25 in. Chassis Overhang - 82.44 in. Front Overhang - 101.44 in. Parameters: Inside Cram Angle: 45.00 ° Axle Track: 82.92 in. Wheel Offset: 4.68 in. Tread Width: 16.60 in. Chassis Overhang: 82.44 in. Additional Bumper Depth: 19.00 in. Front Overhang: 101.44 in. Wheelbase: 255.25 in. Calculated Turning Radii: Inside Turn: 20 ft. 2 in. Curb to Curb: 36 ft. 5 in. Wall to Wall: 41 ft. 9 in.

We provided a Fire Access Plan with the civil plan set. Please refer to sheet C-7. This sheet shows compliance with all vehicle radii and lane widths, as well as showing the location of all fire hydrants on the property. We believe this plan is sufficient and request a waiver from the vehicle tracking plan mentioned. Please note this is an existing site, and the civil design makes improvements to radii where new pavement is being constructed.

Comments: Civil drawings were not included with this submittal. Please upload the applicable civil plans and ensure they clearly indicate the location of the underground fire line, proposed building footprint, existing fire hydrants, all relevant fire protection appurtenances, and fire department access to the proposed structure.

Civil drawings were included with the submission and in fact are still present in the portal where we submit. I suggest the City may have an internal problem with distribution.

Comments: The exhibit from Hole Montes identifies the project location as Sanibel.

Thank you for pointing that out. But the exhibit is obviously about the SWTP.

## **PUBLIC WORKS (STORMWATER)**

1. Please confirm that the proposed improvements (new PW building, generator structure, paved storage areas) are located within the same drainage sub-basin(s) and will be served by the stormwater treatment facilities identified in the approved ERP.

This is covered in our submittal narrative. The ERP anticipated the construction of both the PW facility and the Generator storage.

2. The ERP (No. 11-109788-P) constitutes a regulatory approval based on specific assumptions, including constructed stormwater facilities and site hydrology. If the stormwater system has not yet been constructed, please identify the changes and justify why a permit modification is not required under rule 62-330.315, F.A.C.

The swales have been designed to mimic the swales shown on the ERP Exhibit. The only changes are minor shape deviations to conform to actual conditions. We are including an exhibit of our own to show this. A narrow conveyance swale shown on the ERP along the west side of the entrance drive has been replaced with a pipe, to avoid destruction of the mature Areca hedge.

3. Provide a narrative on how the site provides the required 0.76 ac-ft of treatment requirement.

This is provided in the onsite swales.

4. Confirm that the total impervious area has not increased beyond the threshold that would trigger a major modification under Rule 62-330.315, F.A.C.

There was a drafting error on our sheet C-3. The corrected **SITE SUMMARY** is included below, and to the right of it, is the **PROJECT DATA** from the ERP page 7 of 9. Comparing the two, we see that total impervious on the ERP is 57.3%, while on the SDP it is 53.8%, which is less, therefore, acceptable.

<b>SITE SUMMARY</b>				
DESCRIPTION	AREA	% OF AREA	ERP	
BUILDINGS/TANKS	93,102 SF	28%	86,533 SF	26%
PAVEMENT	83,997 SF	25%	98,264 SF	29%
OTHER (EQUIP. PAD & SIMILAR)	9,438 SF	3%	7,037 SF	2%
TOTAL IMPERVIOUS	186,537 SF	56%	191,843 SF	57%
TOTAL PERVIOUS	148,094 SF	44%	142,796 SF	43%
TOTAL SITE AREA	334,631 SF	100%	334,630 SF	100%

## PROJECT DATA

BUILDING / TANKS	86,533 SF = 1.99 AC. = 25.86%
ASPHALT ROADWAY	98,264 SF = 2.26 AC. = 29.37%
CONCRETE	7,037 SF = 0.16 AC. = 2.10%
TOTAL IMPERVIOUS	191,834 SF = 4.40 AC. = 57.33%
PERVIOUS AREA (GRAVEL/GRASS)	142,796 SF = 3.28 AC. = 42.67%
TOTAL PERVIOUS AREA	142,796 SF = 3.28 AC. = 42.67%
TOTAL SITE AREA	334,630 SF = 7.68 AC. = 100.00%

### PUBLIC WORKS (TRAFFIC)

Confirm that all drive aisle widths, turning radii, and access points are designed in accordance with applicable standards and can accommodate emergency and service vehicles.

**This has been confirmed with the Fire Access Plan that is a part of the civil plan set.**

### PUBLIC WORKS (RIGHT OF WAY)

A separate R/W permit is required during construction. A Stormwater Pollution Prevention Plan (SWPPP) must be submitted prior to land disturbance and must comply with F.A.C. 62-621.300(4) and the NPDES Construction General Permit (CGP) if more than one acre of soil will be disturbed.

An Erosion and Sediment Control Plan, prepared by a licensed professional engineer, must be included as part of the permit submittal. It shall demonstrate compliance with the Florida Department of Environmental Protection's BMP Manual (most current edition).

The contractor is responsible for ensuring that BMPs are implemented, maintained, and adjusted in the field as needed to prevent pollutant discharge and protect adjacent properties and water bodies.

**An erosion and sediment control plan is incorporated on sheet C-2 of the Civil plan set, and BMPs shown on sheet C-76. If this is not sufficient, the GC will submit his own plan, along with SWPPP and NPDES CGP, and a R.O.W. permit.**

### PUBLIC WORKS (MISC)

Ensure there are no protected species in the area before construction. Pre-inspection required. **Is this comment from Public Works or Environmental? Environmental has "passed with conditions". If the condition is the pre-inspection, that will be done with the GC.**

### ZONING REVIEW

Provide elevations of new public works building. We have the covered. open storage elevations but not the building.

**Everything was uploaded, and is in fact, still on the portal. Can you check again, please.**

A variance petition is required for the metal building. Metal is not allowed as primary exterior building material. A variance is required for not providing the required landscape plant material. **It is our understanding that the variance petition has been approved.**

In conclusion, it is our belief that the civil plans (SDPA) originally submitted, with the correction to the SITE SUMMARY, are sufficient and should be approved.

Sincerely,

**AMERICAN ENGINEERING CONSULTANTS  
Of Marco Island, INC.**



c=US, cn=MARTIN DU PRE

PINCKNEY

I agree to the terms defined  
by the placement of my  
signature on this document  
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Martin D. Pinckney, P.E.  
Chief Engineer